

WHAT IS CLAIMED

1. A process for storing and updating control unit data, including a program code for the sequence control or characteristic diagram control of at least one control unit of a vehicle, in a memory assigned to the control unit; said process comprising:

a storing or updating system reading the control unit data out of a data carrier; and

the storing or updating system causing control unit data to be stored in the memory assigned to the control unit.

2. The process according to Claim 1, wherein, in addition to the control unit data, said data carrier also has stored therein navigation data for use by a navigation system or tracking system present in the motor vehicle.

3. The process according to Claim 1, wherein the data carrier comprises one of an optical data carrier, a CD-ROM, a compact disk, a DVD, a holographic data memory, an electric data carrier, a fixed disk, a solid state memory, a flash memory, a chip card and an EE-PROM.

4. The process according to Claim 1, wherein the process is carried out under control of a program-controlled microprocessor.

5. The process according to Claim 1, wherein:

the control unit data are provided with a characterizing feature comprising at least one of a date and a version designation; and

older control unit data are updated or replaced by newer control unit data.

6. The process according to Claim 4, wherein the storing or updating system accesses vehicle characterizing data and reads out from a plurality of control unit data stored on the data carrier, control unit data for a vehicle indicated by means of the vehicle characterizing data or for its control units, for storing and/or updating.

7. The process according to Claim 1, wherein control unit data stored on the data carrier have a plurality of data sections, each of which represents updates or replaces the control unit data of a respective control unit.

8. The process according to Claim 4, wherein the data carrier has stored therein a storing and/or updating instruction for storing or updating sequence control.

9. The process according to Claim 1, wherein at least one of the following is true:

the control unit data stored on the data carrier have been encrypted; and

the control unit data have been provided with control data which protect against falsification.

10. The process according to Claim 9, wherein a storing or updating system performs at least one of the following:

it decrypts the control unit data read out of the data carrier;

it checks the integrity of control unit data readout of the data carrier;

it causes an updating or replacement of control unit data when the decrypting is correct or when integrity is determined.

11. The process according Claim 1, wherein control unit data stored in a control unit include have information characterizing their authenticity or version.

12. The process according to Claim 1, wherein the storing and/or updating of the control unit data is carried out only after a corresponding release by an authorization system, the authorization system preferably being under control of a vehicle manufacturer of the corresponding vehicle.

13. The process according to Claim 1, wherein one of a vehicle identification number and data characterizing the control unit data of a corresponding vehicle are stored in a computer data bank.

14. A system for storing and/or updating control unit data, including a program code for sequence control or characteristic-diagram control of at least one control unit of a motor vehicle, which are stored in a memory assigned to the control unit, said system comprising:

means for reading the control unit data out of a data carrier;

and

means for the storing or updating system causing control unit data to be stored in the memory assigned to the control unit.

15. A computer program product which can be loaded directly into internal memory of a storing or updating system, including a digital computer, wherein it has program sections for implementing a process according to Claim 1, when the product is running on the storing or updating system.

16. A method of inputting control unit data into a control unit in a vehicle that has an on board system including a reader unit which can read data from a removable data carrier, and a data bus that couples said on board system with said control unit; said method comprising:

said reader unit of said on board system reading the control unit data out of said data carrier;

communicating said control unit data to said control unit via said data bus; and

storing said control unit data in a memory associated with said control unit.

17. The method according to Claim 16, wherein said on board system comprises one of a vehicle navigation system, an audio system and a video system.

18. The method according to Claim 16, wherein said carrier comprises one of a CD-ROM, a DVD, a compact disk, a holographic data memory, a fixed disk, a solid state memory, a flash memory, a chip card and an EE-PROM.

19. The method according to Claim 16, wherein:

said carrier contains control unit data applicable to a plurality of vehicles; and

said reading step is controlled by a microprocessor which reads vehicle characterizing information from a memory, and causes said reader

unit to read from said carrier, only control unit data that are applicable to particular vehicle control units.

20. The method according to Claim 19, wherein said characterizing information is stored in a memory maintained by a manufacturer of the vehicle.